Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Grade:\_\_\_\_\_\_\_\_\_\_

Circumference, Perimeter and Area

\*write the formula and show all work

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. What is the perimeter of the ribbon pictured below?  |  |  | | --- | --- | | 16 mm |  | |  | 222 mm |  |  |  |  | | --- | --- | --- | |  | **A.** | 238 mm |  |  |  |  | | --- | --- | --- | |  | **B.** | 576 mm |  |  |  |  | | --- | --- | --- | |  | **C.** | 3,552 mm |  |  |  |  | | --- | --- | --- | |  | **D.** | 476 mm | | 1. What is the definition of pi ()?  |  |  |  | | --- | --- | --- | |  | **A.** | the ratio between the circumference and diameter of a circle |  |  |  |  | | --- | --- | --- | |  | **B.** | the ratio between the circumference and area of a circle |  |  |  |  | | --- | --- | --- | |  | **C.** | the ratio between the radius and diameter of a circle |  |  |  |  | | --- | --- | --- | |  | **D.** | the ratio between the area and diameter of a circle | |
| 1. The area of a poster is 875 in2. If the width of the poster is 25 in, what is the length of the poster?  |  |  |  | | --- | --- | --- | |  | **A.** | 35 in |  |  |  |  | | --- | --- | --- | |  | **B.** | 45 in |  |  |  |  | | --- | --- | --- | |  | **C.** | 15 in |  |  |  |  | | --- | --- | --- | |  | **D.** | 25 in | | 1. The length of a rectangular rug is 4 feet. If the area is 28 feet2, what is the perimeter of the rug?  |  |  |  | | --- | --- | --- | |  | **A.** | 49 feet |  |  |  |  | | --- | --- | --- | |  | **B.** | 112 feet |  |  |  |  | | --- | --- | --- | |  | **C.** | 16 feet |  |  |  |  | | --- | --- | --- | |  | **D.** | 22 feet | |
| 1. Mr. Jackson is putting a fence around his circular swimming pool. If the pool has a radius of 30 feet, and the fence is to be three feet away from the pool, how many feet of fencing does he need? Use = 3.14.  |  |  |  | | --- | --- | --- | |  | **A.** | 39.14 feet |  |  |  |  | | --- | --- | --- | |  | **B.** | 207.24 feet |  |  |  |  | | --- | --- | --- | |  | **C.** | 103.62 feet |  |  |  |  | | --- | --- | --- | |  | **D.** | 188.4 feet | | 1. If Angela wants the table cloth to hang 1 foot over each edge, then how many square feet of material will she need to buy?  |  |  |  | | --- | --- | --- | |  | **A.** | 40 feet2 |  |  |  |  | | --- | --- | --- | |  | **B.** | 55 feet2 |  |  |  |  | | --- | --- | --- | |  | **C.** | 32 feet2 |  |  |  |  | | --- | --- | --- | |  | **D.** | 1. feet2 | |
| 1. If each square of the quilt above measures 6 in × 6 in, what is the perimeter of the quilt?  |  |  |  | | --- | --- | --- | |  | **A.** | 540 in |  |  |  |  | | --- | --- | --- | |  | **B.** | 96 in |  |  |  |  | | --- | --- | --- | |  | **C.** | 36 in |  |  |  |  | | --- | --- | --- | |  | **D.** | 90 in | | 1. Pablo has a cell phone with a circular range.   If *the radius is 300 feet*, what is the area of the cell phone's range? (Use = 3.14.)   |  |  |  | | --- | --- | --- | |  | **A.** | 90,000 ft2 |  |  |  |  | | --- | --- | --- | |  | **B.** | 942 ft2 |  |  |  |  | | --- | --- | --- | |  | **C.** | 282,600 ft2 |  |  |  |  | | --- | --- | --- | |  | **D.** | 1,884 ft2 | |

**Surface Area/Volume**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9) If **X** = 8 units, then what is the volume of the cube shown above?   |  |  |  | | --- | --- | --- | |  | **A.** | 384 cubic units |  |  |  |  | | --- | --- | --- | |  | **B.** | 512 cubic units |  |  |  |  | | --- | --- | --- | |  | **C.** | 544 cubic units |  |  |  |  | | --- | --- | --- | |  | **D.** | 1. cubic units | | 10) If *x* = 2 units, *y* = 11 units, and *z* = 6 units, then what is the volume?   |  |  |  | | --- | --- | --- | |  | **A.** | 200 square units |  |  |  |  | | --- | --- | --- | |  | **B.** | 100 square units |  |  |  |  | | --- | --- | --- | |  | **C.** | 24 square units |  |  |  |  | | --- | --- | --- | |  | **D.** | 132 square units | |
| 11)    If *x* = 5 units, then what is the surface area of the cube shown above?   |  |  |  | | --- | --- | --- | |  | **A.** | 200 square units |  |  |  |  | | --- | --- | --- | |  | **B.** | 150 square units |  |  |  |  | | --- | --- | --- | |  | **C.** | 125 square units |  |  |  |  | | --- | --- | --- | |  | **D.** | 64 square units | | 12)    If *x* = 7 units, then what is the surface area of the cube shown above?   |  |  |  | | --- | --- | --- | |  | **A.** | 196 square units |  |  |  |  | | --- | --- | --- | |  | **B.** | 392 square units |  |  |  |  | | --- | --- | --- | |  | **C.** | 245 square units |  |  |  |  | | --- | --- | --- | |  | **D.** | 294 square units | |